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Non-Profit Law and Science for Global Resource Solutions

COMMENTS ON GOVERNANCE PROPOSALS OF DELTA VISION STRATEGIC PLAN

(Preliminary Staff Draft dated June 18, 2008)

10 July 2008

The Natural Heritage Institute is pleased to submit these comments to the sections of the Preliminary Staff Draft "Delta Vision Strategic Plan" pertaining to **governance** only (we may submit comments on the other sections of the draft in due course)... We find a lot to like in this staff draft. Calling out the ways in which it could be improved—which is the purpose of this critique—does not detract from the good work that the Delta Vision staff has done on this exceptionally challenging and vital exercise.

We do believe that the Preliminary Staff Draft can be improved, however. This draft tends to proliferate new institutions without a clear description of what's broken or how to fix it. That may be in part because of a misunderstanding as to the goals and objectives for delta management institutions, which is an artifact of the way the goals statement has been set up for the entire delta vision process.

A basic premise of the Delta Vision process is that ecosystem health and reliable water supplies are coequal goals for sustainable management of the Delta. This implies that the management objective is to achieve some sort of balance among competing uses, as though this planning effort were driven by the public trust doctrine alone. But that objective does not square with the actual legal drivers nor does it lead to the optimum outcome for either the ecosystem or the water supply agencies. Both ESA and CESA, as construed by the courts and applied by the regulatory agencies, make clear that water supply must yield to the prevention of jeopardy of the listed species. Recent court mandated reductions in exports should remove any doubt on this score. One could go further and say that, as a practical matter, water supply must yield to the recovery of listed species to the extent that water supplies will never be secure as long as species remain endangered in the delta. It is that realization that animates the Bay Delta Conservation Plan.

To restate the goals of the Delta Vision process in a more realistic and operationally useful fashion, we could say that the objective is to reduce conflict between the co-equal goals to the maximum extent possible. Under that formulation, we are not looking to balance competing interests, but to remove the competition. Operationally, that means extracting water at times and places that are least impactful of the fishery resources. And, operationally, improved water supply reliability really means increased dry year supplies (even at the expense of wet year supplies). So the physical solution for the water supply goal

is alternative points of diversion with sufficient capacity to extract larger volumes of water during periods when high inflows and the absence of fish reduce conflicts and multi-year storage so that this water can be available for consumptive uses in those drier years. The physical solution for the ecosystem is more and better habitat for fish spawning, rearing and recruitment, less mortality associated with the diversions, and improved hydrodynamics and temperature regimes. That "vision" is likely to lead to both improved water supply reliability and ecosystem recovery.

Attuning the governance arrangement to achieve that goal leads to the key question: what are the dysfunctions in current governance that inhibit a least-conflict, and therefore, more sustainable future for the Delta? In our view, there are three primary targets for improved governance: (1) existing institutions are limited in their ability to implement, let alone expedite, a robust physical habitat restoration program; (2) the purely regulatory approach to avoiding conflicts between ecosystem health and water supply, while necessary, is not sufficient, as is apparent from the increasing deterioration of both; and (3) the current procedural and financial thresholds for adapting management are unworkably high.

In our view, these are the three governance problems that need to be fixed. These comments suggest how each of these can be addressed, without proliferating new institutions needlessly.

1) Governance of Habitat Restoration:

The staff draft is correct in pointing to the need for an entity to purchase, hold, and manage land for ecosystem restoration. That institution must have the capacity and authority to implement large scale public works (restoration) projects expeditiously. The Department of Water Resources has the capacity, but it is diluted by its competing mandates to provide water supply and flood management services. The Department of Fish and Game holds and manages habitat restoration lands, but its regulatory role limits its ability to effectively perform the functions of a conservancy, opportunistically buying land from private parties and expediting restoration. Local reclamation districts have the ability to quickly expedite engineering and construction contracts and currently serve as the contracting vehicle for levee repair projects in the Delta, but their geographic scope is limited and fragmented.

But we do not need to invent a new entity to undertake broad scale habitat restoration in the Delta to do this. A more parsimonious and less risky approach would be to remove the current barriers to the Coastal Conservancy (and the San Francisco Bay Conservancy, which is nested within it) to perform this role. The Coastal Conservancy has an impressive track record in expediting restoration, but is limited in what it can accomplish in the Delta for two reasons: First, the San Francisco Bay Conservancy can operate in most of the delta counties, but not in Sacramento, Yolo or San Joaquin. This limitation should also be removed.

Second, the Conservancy is actually prohibited from implementing "public works" projects greater then $500,000 without special dispensation from General Services, and therefore is relegated to partnering with less agile agencies to actually implement restoration. Furthermore, it generally refrains from buying, holding, and managing land, and like other public agencies, is averse to taking on new land holdings without a guaranteed revenue

stream to manage those lands. This will be necessary to realize large-scale acquisition and restoration program in the Delta. Without the assurance of a long-term revenue stream, private and public parties will be reluctant to assume the responsibilities and liabilities associated with land-ownership. Long-term funding is a common problem to land conservation activities everywhere, but the liabilities associated with leveed lands, makes this problem particularly acute in the Delta.[1]

The Coastal Conservancy can also play an important planning and coordination role and provide financial resources for the constellation of existing agencies that already perform a range of useful functions, from buying and holding land to engaging in physical habitat restoration in the Delta. The Conservancy should provide resources and incentives to public and private agencies to plan new projects and undertake land transactions. These agencies are as diverse as local reclamation and sanitation districts; regional entities such as the East Bay Regional Park District, the Contra Costa Water District, or even the Metropolitan Water District; and state agencies including but not limited to the Department of Fish and Game and the California State Park system. Other agencies such as the Department of Water Resources, local reclamation districts, or water agencies with deep engineering and project management capacities could be incentivized to actually implement restoration on land held by other parties.

2) Governance of Delta Export Facilities

Dual conveyance facilities will provide the basic physical means for reducing conflict between ecosystem and water supply values by creating flexibility in the time and place of extractions to avoid impacts on the fish. But this increased flexibility to export water is only viable if it does not result in larger net extractions and stresses to the system. Thus, the challenge is to devise a governance mechanism that will assure that the increased capacity to export water cannot be used for that purpose, now or in the future as the water demands of the state grow. The environmental water demands, by contrast, are fixed, if uncertain, in magnitude).

To assure that these functions can co-exist sustainably (on an equal footing under the basic premise of the Delta Vision, or with paramount footing accorded to endangered species as required by existing law); the water exporters and the fish must share ownership rights in the capacity of the new pumps and canals. Under this scheme, the exporters would control sufficient capacity to assure that the water supply targets are met; the fish would control sufficient capacity to prevent harmful impacts; and these rights would be tradable so as to provide flexibility and optimal mutual benefits. For example, the fish can permit a fraction of their capacity to be used for water exports when the effects would be innocuous, and thereby earn capacity credits that they could use to curtail exports at times of vulnerability. This arrangement would complement, not supplant the existing regulatory tools for limiting

[1] Currently, there are large barriers to assuming ownership, even temporarily, of leveed lands in the Delta. The Trust for Public Land's negative experience with Liberty Island and the Nature Conservancy's challenges with Staten Island explain in part the lack of private conservancy activity in the legal Delta. Assurances that a public agency will assume ownership are necessary to rejuvenate private conservancy activity in the Delta while a secure revenue stream is necessary to enable public agencies to assume ownership and management responsibilities with alacrity.

pumping from the Delta, and namely take permits generated out of biological opinions, biological assessments, and declarations of reasonable and prudent alternatives issued by the fishery agencies under ESA and CEQA. Notably, these regulatory hammers have not succeeded in preventing the current downward spiral in populations of listed species nor in assuring a reliable water supply.

There are two reasons to believe that shared capacity allocations would improve performance in both respects. First, using tradable capacity shares to curtail pumping to protect the fishery would not result in reductions in water supply. Second, giving the fish this additional tool can provide the margin of protection needed to recover the species, so that their fate is not so precariously affected by short term swings in the physical conditions in the system. Second, And this arrangement may lend stability to the Delta Vision's *rapprochement* between water supply and ecosystem health because capacity allocations are a fixed property asset not subject to reallocation by legislative whim as water demands build in the state. That may help assure that the additional capacity provided by an isolated conveyance facility will not be used to redefine the current balance of interests.

An NHI white paper on the shared capacity allocation approach is attached for further details.

3) Governance of Adaptive Management:

The staff draft recognizes that the core of an adaptive management regime is the ability to adjust the conservation plan, project operations and regulatory constraints in response to monitoring results. But the draft does not provide a workable mechanism to accomplish such adjustments without imposing additional water or financial cost on the water exporting agencies (which is what they mean by "regulatory assurances"). Existing procedures for modifying permits, regulations or operations are so cumbersome that they are invoked only under the compulsion of crises. This makes the threshold for adjustments so high that only large and exigent changes are accommodated. What adaptive management requires is small adjustments made routinely, easily and immediately. What the Delta needs is a scientifically competent entity that designs and runs a monitoring program, evaluates the results and determines when adjustments would be beneficial (not just when they are necessary), formulates the needed adjustments, implements them automatically and without plenary regulatory processes, determines the compensation due to the water users (if any), and then repeats all of these steps on an ongoing basis. No such entity currently exists in the Delta, in this Delta Vision Strategic Plan, or anywhere else for that matter. It must be invented from scratch. You will find attached an NHI white paper suggesting a "biological risk" insurance mechanism to accomplish this.

Critique of Governance Recommendations:

Against this sketch of governance challenges and solutions, let us look at the recommendations in the staff draft. Before turning to the specific proposals, however, it is notable that the set-up paragraph is right out of fantasy land. The reason it is "easy to forget that our state actually enjoys great abundance, including a generous endowment of water and

diverse ecosystems" is because the facts are starkly to the contrary. We need institutions equal to the challenge of dealing with scarcity, not abundance, in this arid state where the water endowment is extremely variable and where water-dependent ecosystems are tottering on the brink of collapse.

1) **The "Council"** is an animal of indeterminate pedigree and may well prove to be feral:

   a) It would not subsume and would be powerless to alter the authority or decision-making role of other agencies—state or federal. Hence, it has no real regulatory or operational authority. It is merely a planning agency that opines as to whether other actors are conforming.

   b) It is unclear whether its plan would include measurable standards and requirements or how these would be determined. If so, it would presumably incorporate the numerical standards established by the regulatory agencies. If not, it is unclear how consistency would be determined. In either case, it is hard to see how this plan would make much of a difference.

   c) It is not clear what the legal consequence of a finding of inconsistency would be. The Council's role appears to be largely predatory.

   d) Yet, it would control the allocation of funds, which would give it a weapon to use against non-conforming agencies. But this may be unrealistic, as it is hard to imagine that the legislature would be willing to delegate its appropriation decisions to this executive branch agency whose members are appointed by the governor.

   e) Most important, the Council would approve all infrastructure projects, including the isolated conveyance facility (ICF), presumably on the basis of conformance with its plan. Since these projects would require legislative authorization and appropriation, it again appears that the legislature would be asked to constitute a body that could second guess its legislative judgments. This seems unlikely. If durable assurances are to be created by vesting some share of the capacity of the ICF in an entity whose purpose is to control operations on behalf of the fishery, this might best be done by statute (i.e. by the legislature) rather than administrative conveyance of title.

2) Enhanced capacity of the **Delta Protection Commission**. Empowering an entity to "ensure" that local land use planning and regulations conform to the Delta plan could be a step forward. But it is difficult to see how Action 1.2 would accomplish this. Would the DPC have authority to approve county general plans? Development permits issued by local jurisdictions? That would be highly desirable, but we do not see this proposed in the staff draft. Furthermore, we note the historic failure of the DPC to exercise any discretionary oversight over land-use decisions in the secondary zone. We suspect that the current membership, composed largely of representatives from local governments perpetuates a "don't ask, don't tell" culture reminiscent of the failed CALFED Bay-Delta authority where the regulated oversee themselves.

The DPC representative from one county is hesitant to question the plans of another county out of the understandable fear of reciprocity. This proposal could very well be a recipe for empowering an agency to do nothing controversial.

3) Create a **Delta Conservancy**. See comments above regarding expanding the mandate and powers of the Coastal Conservancy as a better alternative.

4) Create a **California Water Utility**.

- Divesting DWR of project operations may be a good idea, as may be forcing greater coordination between the state and federal projects. However, to evaluate the merits of a California Water Utility against some other alternatives (such as the one below), it is necessary to identify the precise dysfunctions in current operations that the California Water Utility would fix. This is a generic criticism of the staff draft. It would be helpful if the next draft of the Delta Vision Strategic Plan would disclose its sense of the governance problems and then show how its proposed solutions are just that.

- Alternatively, a *de facto* joint operating authority might be created through strengthening of the Coordinated Operating Agreement (which may or may not require Congressional and legislative authorization) and through joint points of diversion authorization from the State Board, even before transfer of the CVP to the state (which may not happen soon or at all).

- The idea of appealing operational decisions of the Delta Operations Team to the Council for resolution seems a bit fanciful. By the time that 5 member body could take action, the operational issue will be part of the dustbin of history. What is needed is high-confidence, instantaneous, real-time management. That is what the concept on tradable shares of canal capacity could achieve, and why it may be a better alternative.

5) Create a Delta Science Program and **Delta Science and Engineering Board**

- A robust delta science program already exists. The real issue is how to assure a dependable funding stream and how to make better use of the outputs.

- As envisioned in the draft, the Delta Science and Engineering Board would be purely advisory to the Council—an inherently political body. That is not an improvement over the *status quo*. Far better would be to vest the Board with some real power to implement its findings and conclusions. The best role for it might be to serve as the entity that designs the adaptive management monitoring plan and makes the judgment calls on whether and how regulations or operations in the Delta need to change to reduce conflicts between--and optimize--ecosystem functions and water supply reliability. This becomes feasible and acceptable if (but only if) the water exporters are insulated from the water and/or financial costs of these modifications, as per the proposal for an ecological risk insurance pool that NHI has proposed.

6) Create an **Adaptive Management Program**

- As noted, having the Council serve as the adaptive manager will assure rigidity where we need flexibility, delay where we need speed, and politics where we need science.

- The big challenge is translating monitoring data into regulatory and operational adaptations, without impairing water supply reliability. That is where the "biological risk insurance" concept has particular merit.

7) Create a "legally binding" **California Delta Ecosystem and Water Plan**

- It does not appear that this plan would actually have legal force and effect, as noted above.

- Even if it did, the delta does not lack for plans that have operational force and effect. There is the State Board's Water Quality Control Plan (and water rights decision to implement it), the CalFed Plan and Record of Decision, the USBR's OCAP, DWR's State Water Plan (and updates), the fishery agencies recovery plans (in due course, we can only hope), and soon the Bay Delta Conservation Plan. These are already (more or less) coordinated. Presumably, the California Delta Ecosystem and Water Plan will either subsume these (in which case, what is really gained?), or supersede them (which will require amendment of existing state and federal environmental laws as they pertain to the Delta, a dangerous and impractical idea). Once again, it is hard to see what the problem is for which yet another plan is the solution. It may be a good idea, but this draft does not reveal why.

8) Assure that **environmental justice** is adequately addressed

- A good and worthy goal. To bring some realism to bear, however, please acknowledge that the principle of "beneficiary pays" when applied to the goal of providing a safer and more reliable water supply to underserved communities means higher costs for these consumers.

9) Improve **compliance with existing law**

Excellent recommendations

10) Develop a **financing plan.**

Excellent recommendations

We hope you find these comments useful in crafting a next iteration.

Concept Offered for Consideration by

BDCP Governance & Implementation Work Group

Offered by Natural Heritage Institute

July 8, 2008

The critical infrastructure improvement emerging in the BDCP to move the delta from a high conflict to a low conflict environment is the isolated conveyance facility (ICF), which may be operated in a dual conveyance configuration with the south delta pumping plants. NHI regards the ICF as a linchpin for the success of the BDCP. The virtue of constructing an additional point of diversion is that it will increase the flexibility of water extractions to avoid conflicts with the fish. But the ICF will also increase the ability to extract water from the system, which raises concerns among environmental interests about potential for inflicting additional damage on the fisheries, among area of origin interests about increased exports of Sacramento Valley water moving to the southland, and among delta farmers about salinity intrusion.

NHI also regards the governance arrangement for the ICF as the linchpin for its acceptability. As the NGO members of the BDCP Steering Committee have made clear, our support for the ICF is highly qualified. It is expressly conditional upon the emergence of a satisfactory governance arrangement that will provide ironclad assurances of its efficacy to reduce conflicts and to avoid additional stress on the system. Specifically, the governance arrangement must satisfy three checkpoints:

1) It must improve the operations of the new diversion facility compared to the governance mechanism for the existing delta export pumps—basically incidental take permits and biological opinions of the fishery agencies and the Water Quality Control Plan of the SWRCB-- which have failed to prevent an increasingly acute endangered species crisis.

2) It must advance the political viability of the ICF. Here, the governance challenge is to assure that an increase in the capacity to move water out of the delta will not be used for that purpose, now or in the future as the water demands of the southland grow. This challenge is exacerbated by the reality that the economic and political power of the service area for the delta exports far exceeds that of these vulnerable constituencies. Thus, limitations on the use of the ICF to increase exports of water must be durable over time such that any limitations agreed to in the BDCP conservation plan cannot be abrogated by legislative fiat in the face of the inevitable future water supply crises in the state.

3) It must include an adaptive management mechanism. Hence, the governance arrangement must be flexible enough so that the operation of the ICF can adapt to lessons that will emanate from the monitoring program, yet predictable enough to assure that the water supply objectives of the BDCP will be met.

This paper proposes a governance structure for the ICF that will satisfy these checkpoints.

The basic premise is that if there going to be a peripheral canal (ICF), the fish must be able to control its use to the extent necessary to assure that exports will occur in quantities and at times that will actually reduce rather than increase impacts on the delta. A way to accomplish this objective, that supplements rather than supplants the current arsenal of regulatory tools, is to give the fish ownership rights over some fraction of the capacity of the ICF. This would give the fish a constraint on the operations of the ICF that they can manage as they think best to protect themselves. One can envision a "cap-and-trade" type of arrangement—not unlike the EWA. The fish and the project operators negotiate the timing and rates of exports by engaging in transactions (contracts) to trade their capacity credits with a view toward minimizing conflicts with the fish and maximizing water supply reliability.

For illustration, suppose the fish and the project operators are each allocated 50% of the capacity of the ICF, and that the trading rules work as follows: The fish dictate in real time the pumping rates into the canal. When larger volumes of extractions can be accomplished without harm to the fish, they could allow a portion (or all) of their capacity rights to be utilized by the water projects in exchange for larger capacity constraints that they could utilize at times when they are vulnerable. When the fish allow more than 50% of the capacity to be used for water exports, the fish earn a volume X time credit that they can use whenever they want to reduce or eliminate extractions, such as when they are in proximity to the diversion facilities. To the extent that the fish want to impinge on the 50% capacity allocated to the project operators, the latter earn a volume X time credit that they can use to assure that the BDCP water supply objectives are met. Credits would have to be used or lost during some rolling number of years. A more elaborate structure would also confer on the fish property rights to a portion of the capacity of the south delta pumps.

It apparent that this construct could lead to the type of flexible , adaptive management that allows operations to improve as we learn how the biota of the delta respond to changes in physical conditions resulting from conservation measures and project operations. But will this property-rights based mode of limiting the use of the peripheral canal improve on the current regulatory tools (which they will supplement, not supplant)? There are several reasons to answer this in the affirmative:

1) These ESA/CESA tools have not worked very well to limit the use of the capacity of the existing conveyance facility (the south delta pumps). As the Water Operations Management Team, comprised of the regulatory agencies and the water projects, seeks to find an accommodation between species protection and water reliability, there is a tendency to resolve uncertainties in favor of meeting water supply obligations.

2) The ESA/CESA constraints are aimed at preventing jeopardy, whereas the BDCP aims for recovery

3) We can get more surgically beneficial operations with the type of real time controls on pumping that capacity credit trading could provide.

There are other practical advantages, as well: The ICF is not politically acceptable as long as its use is only constrained by current law and government institutions. And a construct of this sort would neutralize the debate over the size of the ICF. A larger pipe would simply entail a larger portion of the capacity being allocated to the fish. This would be advantageous in that, other considerations (such as cost) aside, the larger the pipe, the greater the operational flexibility (especially if coupled to increased capacity to park the water south of the delta).

Another issue is the character of the entity that can best hold title and exercise operational controls on behalf of the fish. There are two considerations: (1) durability and (2) efficacy.

To satisfy the political viability checkpoint, it is imperative that the capacity allocations negotiated in the BDCP, as a condition of the endorsement of an ICF, be insulated from the power of the state government to alter them in the face of future water demands. Immutability is not easy to accomplish under the law. The most durable water allocation construct that the law affords is an interstate compact, which requires both an act of congress and the consent of all of the states to amend. But the delta water system is wholly in-state. Legislative enactments are inherently unstable in this context where the political and economic power of the service area predominates over the area of origin of delta waters. Even super-majority arrangements such as constitutional amendments are not immutable. Regulations, joint powers authorities, or even contracts among public agencies can all be altered by legislation. On inspection, it turns out that the most durable (and yet flexible) construct is probably state and/or federal legislation that authorizes DWR and/or USBR to construct the ICF (and appropriates funds to pay for it?) and which instructs these project operators to convey ownership of a specified fraction of the capacity of the ICF to an institution that can act as the trustee for the fish. The legislation should also make this capacity share tradable with the project operators. This makes the capacity ownership a vested property right conferred by statute, not merely a contract right between a sovereign and a private party. That should give it durability under the law.

However, this recommendation simply substitutes for the question of how to govern the ICF, the question of how to govern the fishery protection corporation. There would seem to be three options, which should be resolved in favor of the one that would be most efficacious in performing this role:

1) The board of directors would be entirely comprised of non-governmental individuals and/or institutions, appointed by one or more political bodies such as the state legislature, the governor, or state or federal executive branch department heads.
2) The board of directors would be entirely comprised of governmental agencies (e.g., the fishery agencies, or the fishery agencies plus the project operators—resembling the WOMP)
3) The board of directors would be comprised of both the fishery agencies and non-governmental organizations with an unalloyed environmental mission, appointed as in option # 1.

Of these, the first option would seem to create coordination issues with the regulatory agencies, and second option would not seem to provide the necessary political insulation. This inclines us toward the third option.

NHI therefore recommends that the BDCP implementation strategy include a recommendation for legislation to authorize the construction of the ICF and to convey a fractional (and tradable) interest in its capacity to a corporation with specified characteristics, including a board of directors comprised of the fishery agencies and NGOs appointed by specified governmental bodies.

There are many tricky (but not insurmountable) issues that would have to be resolved to make this governance option feasible:

- Could private rights be conferred over infrastructure that is publicly financed?
- What should be composition and charter of the private corporation? What interests should be represented? How would it be funded? How would it itself be governed?
- Should the corporation have the right to contract directly with SWP/SWP contractors to deliver water out of its capacity, perhaps on an interruptible basis in the event that covered fish unexpectedly show up at the export pumps?
- What other functions would the corporation have, if any, to implement the BDCP? Should it be the adaptive manager? If not,
- How would the corporation interface with the adaptive management program?

A "Fail-Safe" Adaptive Management Mechanism for the Delta HCP/NCCP

To Deal with the Inherent Uncertainties in the Efficacy of the Conservation Strategy

May 30, 2008

The Bay Delta Conservation Planning process is animated by the desire of both the water supply agencies and the covered species for a secure future. All parties realize that the delta as a water supply system will never be secure if its species remain endangered, and that the delta as an ecosystem will never be safe as long as water diversions remain highly stressful. Thus, the "holy grail" for the BDCP--which has eluded all of the previous planning processes--is a set of measures that will restore the species while capping the regulatory liability of the exporters. If BDCP can get there, this framework will define the future of this water system for the next several decades.

To succeed, the framework must be rigid enough to insulate the water supply agencies from open-ended regulatory liability yet be flexible enough to assure that the conservation measures will actually recover the species. If we understood reliably how the living elements will respond to improved physical conditions, this balance might not be too difficult to achieve. But we don't. No aquatic system on this continent is as complex, variable and unpredictable as the delta, especially in the face of further expected physical alterations of its hydraulics and landforms. Thus, the BDCP must face up to the reality that the delta is not only more complex than we do understand; it is more complex than we can understand. Never before has an HCP/NCCP been attempted for a system that is so fraught with surprises.

The conservation measures that will be included in the BDCP will really just be our collective best guess as what measures will be efficacious. They are the working hypothesis for a regulatory experiment. To avoid imposing the risks of failure on the species, it is essential that the results be monitored and the measures modified as necessary. That process of dynamic adjustment in response to monitoring is the heart of adaptive management.

But such dynamic adjustment must take place without violating the regulatory assurances that have been accorded to the PREs in the Statement of Principles that set up the BDCP. This agreement assures the PREs that the permitting agencies will not:

"**require the commitment of additional land, water, or financial compensation or additional restrictions on the use of land, water, or other natural resources beyond the level otherwise agreed upon for Covered Species, without the consent of the affected Potential Regulated Entities".**[1]

In sum, the parties have made a commitment in advance that the conservation measures incorporated into the BDCP will constitute the entire and final obligations of the PREs toward the conservation and recovery of the covered species. This amounts to an unqualified guarantee that no additional conservation or mitigation measures will be required --irrespective of how adequate these measures prove to be--unless the water or financial costs of such measures are absorbed by others. For instance, if DFG, FWS or NMFS believe that the survival of the species requires reductions in delta exports, the costs of purchasing substitute water supply cannot be imposed on the PREs. This is hugely problematic if the payment obligation falls on the shoulders of the permitting agencies unless they have a permanent funding stream, not

[1] **4.5. Regulatory Assurances Under FESA**

Upon approval of the BDCP and issuance of incidental take permits for Covered Activities, USFWS and NMFS will provide assurances to the Potential Regulated Entities that neither the USFWS nor NMFS will require the commitment of additional land, water, or financial compensation or additional restrictions on the use of land, water, or other natural resources beyond the level otherwise agreed upon for Covered Species, without the consent of the affected Potential Regulated Entities, in accordance with 50 C.F.R. section 17.22(b)(5), section 17.32(b)(5), and section 222.307(g).

4.6. Regulatory Assurances Under the NCCPA

If the BDCP meets the criteria for issuance of NCCP permits under section 2835 of the Fish and Game Code, DFG will approve the BDCP and provide assurances consistent with its statutory authority upon issuance of NCCP permits. Under section 2820(f) of the Fish and Game Code, DFG may provide assurances for the Covered Activities commensurate with the level of long-term conservation and associated implementation measures provided in the BDCP, including the assurance that, if unforeseen circumstances arise during implementation of the BDCP, DFG will not require additional land, water, or financial compensation or additional restrictions on the use of land, water, or other natural resources without the consent of the affected Potential Regulated Entities, as long as the BDCP is being implemented consistent with the terms of the Implementation Agreement and associated take permit.

dependent upon the vagaries and politics of annual appropriations from the Congress or the legislature.

Thus, a critical element of the BDCP—essential to make the adaptive management program work—is a fund to defray the potential costs of adjusting the conservation program in response to the monitoring results. Unless this is included, the BDCP deal may not be one that the fishery agencies can conscientiously agree to without imposing an unacceptable level of risk on the vulnerable species.

What would a workable funding mechanism look like? NHI proposes that the BDCP set up a "biological risk" insurance arrangement wherein the PREs would pay "premiums" into a contingency fund that would be available to the adaptive manager (the permitting agencies?) to defray the costs of implementing additional conservation measures, should the initial requirements prove insufficient to meet the conservation objectives. In the event that little or no adjustment is needed, any surplus premiums would be refunded to the PREs. Perhaps this premium should be calibrated to the volume of each exporter's extractions from the delta. In that event, it would operate like a user fee. The State Water Contractors have already put user fees on the table in the governance working group.[2] NHI proposes that that approach be broadened to also cover the biological risk insurance premiums here proposed.

There are many issues to resolve in this concept:

- How to establish an actuarial basis for the risk premiums (how to determine the size of fund needed to cover all appreciable risks over the long-term)
- How to apportion the user fees among water exporters (and other diverters upstream of the delta?)
- How and by whom will the fund be administered
- How much evidence of failure is required before the additional conservation measures can be imposed (and the contingency fund drawn upon)
- How to determine whether and when to refund surpluses

[2] "Alternative Strategic Plan Element, Bay Delta Governance and Finance" April 28, 2008, at page 8, in which it is proposed that the State and federal contractors will pay full costs associated with construction and mitigation of conveyance facilities that provide a "supply and reliability benefit". Surely, measures necessary to prevent jeopardy under ESA/CESA as essential to water supply reliability. The contractors propose that such fees should be "broadly based and equitably assessed, recognizing the impact of all diversions and other stressors in the watershed". This may imply that the water user fees should be assessed on all who divert from the system, including those upstream of the delta.

- The decision-making processes and legal rights and remedies associated with all of the above.